

Review of Federal Financial System Operating Procedures
Report No. 98-21, September 14, 1998

Background

The FFS was jointly developed by the American Management Systems, Inc. (AMS) and the Railroad Retirement Board (RRB). It is currently used by federal agencies nationwide. The RRB uses the FFS to track and maintain its financial records and to make payments to outside vendors for goods and services. The RRB's financial transactions maintained in FFS provide the basis for the agency's annual financial statements. As of September 1997, the net position of the RRB's trust funds and accounts was \$15.4 billion.

The Bureau of Fiscal Operations (BFO) is responsible for managing the financial records of the RRB, and the Bureau of Information Services (BIS) supports BFO in that function by maintaining the FFS computer operations.

FFS allows flexible file organization, but only one file update to process at any given time. Data is generally entered and held in a queue until the BIS performs the nightly batch processing. AMS provided the programs and job control language used to run FFS, as well as user and operation guides. An electronic data interchange link between the RRB and the U.S. Department of Treasury is also provided for automated disbursements.

FFS performs quick edits of data entered before processing, as well as other system assurance checks for accurate and reliable data. Additionally, FFS produces several statistical reports which also allow the detection of problems. The BFO is responsible for reviewing these reports.

Objective, Scope and Methodology

The objective of this review was to determine whether: (1) the operating procedures can be streamlined, both in the computer center and program bureaus; (2) manual intervention in the day-to-day operation of computer systems can be minimized or eliminated; and (3) efficiency and effectiveness of the computer system can be increased to satisfy the agency's mission and the customer service goals. The scope of this review was limited to FFS activity in fiscal year 1998.

To accomplish the objectives, we:

- reviewed FFS documentation including user and operation guides,
- reviewed RRB's customer service and annual performance plans,
- reviewed FFS job schedules,

- reviewed daily and monthly FFS job logs and output maintained by BFO,
- reviewed FFS processing times and reasons for jobs that abnormally end (abend), and
- interviewed RRB personnel.

The review was performed in accordance with generally accepted government auditing standards appropriate for the objectives described above. The field work was performed at the RRB headquarters office in Chicago, Illinois from January through August 1998.

Results of Review

This review determined that the FFS is generally operating in an efficient and effective manner, and only one change to formalize the restart instructions in the operating procedures is needed. The RRB's mission and customer service plan showed that FFS operations are not directly addressed. However, the customer service goal of trust fund asset management is FFS-oriented. Our review indicated the RRB has met the fiscal years 1996 and 1997 customer service goals established for trust fund asset management.

In the last five years, the RRB made three major changes in FFS operations to improve processing. Two occurred in August 1993: a new version of FFS was installed at the RRB, and FFS and the Program Accounts Receivable System were split off into separate production runs. BFO estimates that these two actions improved processing time by about 66 percent. The agency initiated a third improvement in 1996 that consists of weekly automated file reorganizations to remove unused space between the records. The file reorganizations are scheduled to run through the RRB's automated job scheduler, and no manual intervention occurs.

The details of our recommendation for improvement are discussed below.

FFS Processing and Restart Instructions

FFS processing begins each night with a tape backup of the entire system maintained on the RRB's mainframe direct access storage devices. This is the only action in nightly FFS operations where manual intervention is needed unless a job abends. The FFS administrator must review abends to determine the reason and extent of an error. When an abend occurs, processing is generally delayed until the next business day. When no abends occur, each job is automatically started by the job control language contained at the end of the previous job. FFS run times during the period of December 22, 1997, through February 12, 1998, averaged approximately 41 minutes. The elapsed time without tape backup ranged from 13 to 35 minutes.

Restart instructions provide a means to immediately restart processing after an abend, particularly those in which analysis is not necessary to determine the cause or extent of an

error. We reviewed the reasons for FFS job abends during the period December 22, 1997, through June 25, 1998, and found that one-half occurred during the initial tape backup process. This type of abend can generally be corrected without FFS administrator review and, therefore, would allow immediate processing in the same night.

The high volume of abends at tape backup is believed to be caused by the RRB's aging tape drive equipment and faulty tapes which are scheduled to be replaced over the next five years. As an interim measure, informal FFS restart instructions for tape backup abends have been transmitted verbally to computer operations. This method increases the risk that those instructions may be misunderstood or otherwise not followed. Additionally, changes in the computer operations staff may result in the informal restart instructions being completely overlooked.

Recommendation

The Chief Information Officer should prepare formal written restart instructions for FFS job abends.

Management's Response

The Chief Information Officer has agreed with this recommendation. The expected completion date is September 30, 1998.